

South Dakota Participation

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South Dakota Science and Technology Authority
(SDSTA)

Homestake DUSEL

April 20, 2007



South Dakota
Science and Technology
Authority

Homestake Mining
Company

Administration Building
630 East Summit Street



In 2004 legislation and funding from the state created the SDSTA to enable early access for science at the Homestake Interim Laboratory.



In April 2006, Barrick Corporation signed a Property Donation Agreement transferring title to the SDSTA

- SDSTA ownership includes
 - 186 surface acres and buildings
 - All of the underground workings (~800 acres)
 - All mineral rights (~7,700 acres)
 - Personal property and equipment for Mining-to-Labs Conversion (e.g., extensive u/g and surface infrastructure, pumps, ropes, spare parts, tools, electrical cable, water-treatment facility)
- Property Donation excludes reclaimed property and associated environmental liabilities such as:
 - Open Cut
 - Former mill and ore-processing sites
 - Grizzly Gulch tailings pond

Homestake and Lead Aerial Photo

Water Treatment Plant

Open Cut

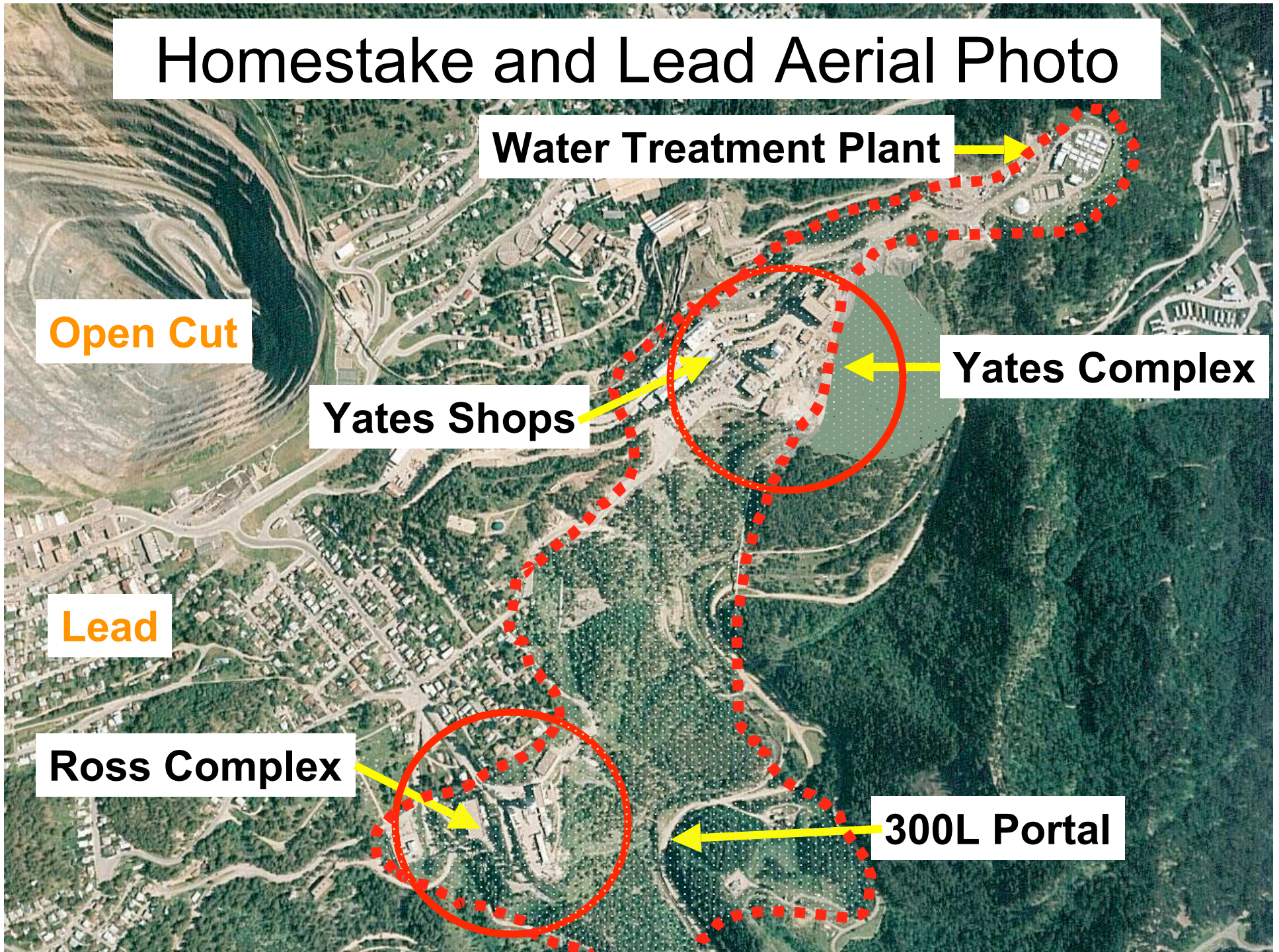
Yates Shops

Yates Complex

Lead

Ross Complex

300L Portal



Primary Conditions of the Property Donation Agreement

- SDSTA owns the property in perpetuity. Barrick relinquishes all rights of ownership.
- The property must be used for scientific and educational purposes.
- SDSTA must provide indemnity to Barrick with \$10M escrow and insurance requirements. (This is in place.)

SDSTA's role is to manage the property, develop and operate the Interim Laboratory in preparation for the phased development of DUSEL.

In 2006, T. Denny Sanford pledged \$70M to support the development of the laboratory

- The gift was made to the SDSTA and is under Authority control.
- \$70M gift has three parts:
 1. \$35M to develop the Interim Lab and Infrastructure from the surface through 4850 Level
 2. \$20M for the Sanford Center for Science Education
 3. \$15M for dewatering and to develop infrastructure for access to Deep Levels below 4850
- Conditions for the Sanford Gift:
 - Facility is to be named for Sanford
 - Contingent on sole selection of Homestake for DUSEL by NSF
 - Funding of \$10M secured from other sources for experiments at Homestake
 - Expenditure of State funds allocated for the Interim Lab



Funds Administered by the SDSTA

| | |
|--|----------------|
| • HUD funds | \$ 10M |
| (For maintenance of the integrity of the infrastructure during the NSF decision process) | |
| • SDSTA funds | \$ 35M * |
| • <u>Sanford Gift</u> | \$ 70M |
| Total | <u>\$ 115M</u> |

* Plus accruing interest

The timing for expenditure of these funds to develop the interim laboratory is contingent upon demand for scientific uses.

Planned Upgrades and Property Improvements

SDSTA-controlled resources will be used to complete infrastructure improvements which will enable DUSEL development to start at the 4850 level.

- Improved Access to the 4850 Level:
 - Rehabilitation of the Yates and Ross Shafts
 - Hoist modernization
 - Thyristers to replace the MG sets
 - Automated, computer-controlled systems
 - Automated Personnel Hoist (enabling ~10 minutes from dry to 4850)
 - Yates conveyance customization
 - Increased size-capacity for materials and equipment

Planned Upgrades and Property Improvements (cont.)

- Underground Laboratory Development for Scientific Research
 - Sanford Underground Laboratory at the 4850 Level
 - Planned Low-background Counting Facility
 - Radon-reduced air supply for underground experiments
 - New services, utilities and communications
- Infrastructure upgrades to prepare for DUSEL below 4850 Level
 - Deep dewatering & operation of maintenance-pumping systems
 - Infrastructure development for access to 8000 Level
- Surface Infrastructure Enhancements for User Support
 - Building conversion and optimization
 - Office and laboratory space, support vehicles
 - Facilities for Education and Public Outreach
 - Sanford Center for Science Education

Status of Rehabilitation

- Surface work
 - Both Ross hoists re-commissioned
 - Fan installation on #5 shaft nearly complete
 - Material either acquired or bid
- Underground work
 - Bids received
 - Approval by Board at May 10th Board meeting
 - Start underground June 1st
 - Projected completion by September 1st

Summary of SDSTA's Role in preparation for DUSEL

- Hold title to the property
- Ensure compliance with the Property Donation Agreement and state requirements (including environmental protection and safety)
- Conduct rehabilitation and conversion into laboratories and space for user-support
- Develop Education and Public Outreach facilities and programs
- Help solicit proposals and secure experiments for the Interim Laboratory
- Manage the physical property of the facility
- Provide the entity for management and operations of the property and infrastructure until the DUSEL management structure is established
- Assume a landlord role once DUSEL is established

SDSTA's Intent

- Strategy intended to make Homestake a viable choice
 - Maximize advantages
 - Overcome disadvantages
- No intention to compete with DUSEL
- Upon site selection the Authority will:
 - Work with NSF and entire scientific community to maximize use of funds under our control
 - Will fill positions with input from entire scientific community and funding agencies
 - Board
 - Executive Director
 - Laboratory Director
 - Safety and other key roles

